

526 Rec'd PCT/PTO 30 MAR 2000

FORM PTO-1390 (REV. 12-29-99)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371]3455-	
				U.S. APPLICATION NO. (If known, use 37 CFR 1.51) 09/509695	
INTERNATIONAL APPLICATION NO. PCT/GB98/0294]		INTERNATIONAL FILING DATE 30 September 1998		PRIORITY DATE CLAIMED 01 October 1997	
TITLE OF INVENTION PHEROMONE COMPOSITION					
APPLICANT(S) FOR DO/EO/US GEORGE HENRY DODD					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
<ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). 					
<p>Items 11. to 16. below concern document(s) or information included:</p> <ol style="list-style-type: none"> 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input type="checkbox"/> A change of power of attorney and/or address letter. 16. <input type="checkbox"/> Other items or information: 					

U.S. APPLICATION NO (if known, see 37 CFR 1.53) 09/509695		INTERNATIONAL APPLICATION NO PCT/GB98/02941		ATTORNEY'S DOCKET NUMBER 13455																					
17. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) : Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$970.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO. \$840.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$690.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$670.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) \$96.00 ENTER APPROPRIATE BASIC FEE AMOUNT =				CALCULATIONS PTO USE ONLY																					
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 840.00																					
<table border="1" style="width:100%; border-collapse: collapse;"><thead><tr><th style="width:15%;">CLAIMS</th><th style="width:20%;">NUMBER FILED</th><th style="width:20%;">NUMBER EXTRA</th><th style="width:20%;">RATE</th></tr></thead><tbody><tr><td>Total claims</td><td>20 - 20 =</td><td>0</td><td>X \$18.00</td></tr><tr><td>Independent claims</td><td>1 - 3 =</td><td>0</td><td>X \$78.00</td></tr><tr><td colspan="3">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td><td>+ \$260.00</td></tr><tr><td colspan="3">TOTAL OF ABOVE CALCULATIONS =</td><td>\$ 840.00</td></tr></tbody></table>				CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	Total claims	20 - 20 =	0	X \$18.00	Independent claims	1 - 3 =	0	X \$78.00	MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$260.00	TOTAL OF ABOVE CALCULATIONS =			\$ 840.00	\$ 0	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE																						
Total claims	20 - 20 =	0	X \$18.00																						
Independent claims	1 - 3 =	0	X \$78.00																						
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$260.00																						
TOTAL OF ABOVE CALCULATIONS =			\$ 840.00																						
Reduction of 1/2 for filing by small entity, if applicable. A Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).				\$ 0																					
SUBTOTAL =				\$ 840.00																					
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ 0																					
TOTAL NATIONAL FEE =				\$ 840.00																					
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 0																					
TOTAL FEES ENCLOSED =				\$ 840.00																					
				Amount to be																					
				refunded: \$																					
				charged: \$																					

a. ☒ A check in the amount of \$ 840.00 to cover the above fees is enclosed.


b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1039. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

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SIGNATURE:
Charles N. Quinn, Esq.
NAME
27,223
REGISTRATION NUMBER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of : Group Art Unit: N/A
George Henry Dodd :
Serial No.: Not yet assigned : Examiner: N/A
Filed: March 30, 2000 :
Title: Pheromone Composition :
International Application No.: PCT/GB98/02941 :

PRELIMINARY AMENDMENT

Assistant Commissioner for Trademarks
Washington, D.C. 20231
Box PCT

Dear Sir:

Prior to submission of the inventor's oath and calculation of the surcharge please amend
the claims of this application as follows:

3. (Amended) A composition as claimed in claim 1 [any of claims or 2] wherein the carrier is an aliphatic alcohol or propylene glycol.
4. (Amended) A composition as claimed in claim 1 [any of the previous claims] wherein the composition comprises trimethylamine hydrochloride and 5-alpha-androst-16-en-3- α -ol.
5. (Amended) A composition as claimed in claim 1 [any of the preceding claims] wherein the composition is a liquid
6. (Amended) A composition as claimed in claim 1 [any of the preceding claims] which is formulated for injection into bait.
7. (Amended) A composition as claimed in claim 1 [any of claims 1-5] which is formulated as a spray.
8. (Amended) Plastic bait including the composition as claimed in claim 1 [any of claims 1-5]
9. (Amended) Dried ground bait including a composition as claimed in claim 1 [any of claims 1-4]

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A1

Please add the following additional claims:

- A2
10. A composition as claimed in claim 2 wherein the carrier is an aliphatic alcohol or propylene glycol.
 11. A composition as claimed in claim 10 wherein the composition comprises trimethylamine hydrochloride and 5-alpha-androst-16-en-3- α -ol.
 12. A composition as claimed in claim 11 wherein the composition is a liquid.
 13. A composition as claimed in claim 12 which is formulated for injection into bait.
 14. A composition as claimed in claim 12 which is formulated as a spray.
 15. Plastic bait including the composition as claimed in claim 12.
 16. Dried ground bait including a composition as claimed in claim 10.
 17. Dried ground bait including a composition as claimed in claim 11.
 18. Plastic bait including the composition as claimed in claim 11.
 19. Plastic bait including the composition as claimed in claim 10.
 20. Plastic bait including the composition as claimed in claim 2.

Subject to submission of the inventor's oath in payment of the surcharge applicant respectively solicits a prompt and thorough examination of all of the claims pending in the application.

Respectfully submitted,

SAUL, EWING, REMICK & SAUL LLP

By:



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1 PHEROMONE COMPOSITION

2

3 The invention relates to compositions formulated to

4 attract fish, in order to capture them. More

5 particularly the composition may be used in a liquid

6 form to be applied onto or into bait, lures or flies

7 which are used by anglers and commercial fishermen

8 alike.

9

10 Angling and fishing are sports which attract a large

11 number of people. A wide range of bait, lures and

12 flies are marketed at these persons in order to provide

13 them with more success in catching fish.

14

15 Some organic compounds are known to be active in the

16 feeding response of some species by enhancing feeding

17 or attracting fish to a general area. They are known

18 to occur at low concentration levels in crustacea and

19 also in a range of decomposing animals. Such compounds

20 are small organic odorants.

21

22 It has been reported that women have a greater success

23 rate in catching salmon than male anglers (see *Salmon*

24 *and women*, W. Paterson & P. Behan, published by H, F &

25 G Witherby Ltd 1990).

34 In one embodiment the invention provides at least one
35 female human pheromone together with an acceptable
36 carrier.

1990-1991		1991-1992		1992-1993		1993-1994		1994-1995		1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217	
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1 Alternatively the composition can comprise a synthetic
2 female pheromone with a carrier. Preferably the
3 carrier solubilises the compound.

4
5 Preferred carriers include aliphatic alcohols such as
6 ethanol, monoethylene glycol and propylene glycol.

7
8 It is preferred that the pheromone used in the
9 composition of the invention be at least trimethylamine
10 or one volatile steroid of the androstene family
11 together with at least one compound chosen from a
12 complex array of alkanolic acids, including those having
13 a carbon atom number ranging from C4 to C5 and
14 especially substituted acids having a carbon atom
15 number ranging from C8 to C10.

16
17 A particularly preferred composition comprises at least
18 one salt of trimethylamine (typically the
19 hydrochloride) and 5- α -androst-16-en-3- α -ol.

20
21 A preferred composition according to the invention may
22 comprise in association with nature-similar versions of
23 human female pheromones, a suite of other potent aroma
24 chemicals (referred to herein as Key Impact Odorants
25 [KIOs]) which occur in both fresh and decomposing
26 animal tissue.

27
28 These other KIOs can be special amines and associated
29 heterocyclic compounds including nitrogen and sulphur
30 such as indole and skatole. It is also preferred that
31 the odorant compounds be provided with concentrations
32 of several order of magnitude higher than the ones
33 which are found in conventional bait.

34
35 The composition of the invention can be used in various
36 embodiments.

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1 In one embodiment the composition is a liquid which
2 bait, lure, fly, ground bait and/or hooks can be dipped
3 into or the liquid can be poured onto the bait, lure,
4 fly, ground bait and/or hooks.

5

6 The composition of the invention may also be formulated
7 as a spray to allow easy manipulation by the users and
8 could either be hand pumped or gas driven.

9

10 In a preferred embodiment the composition is formulated
11 to be injected into bait.

12

13 Alternatively the composition can be incorporated into
14 plastic bait.

15

16 To attract fish one may apply the composition of the
17 invention on a bait or a suitable support and provide
18 it in area where fish are used to be found.

19

20 The composition may also be applied directly onto bare
21 hooks.

22

23 The composition of the invention can be formulated for
24 a wide range of applications including combining with
25 floatant, spraying flies, combining with greasing or
26 degreasing agents to enable bait to float or sink as
27 required.

28

29 The formulation can also be combined with ground bait
30 and dried for storage purposes.

31

32 Formulations of the present invention are surprisingly
33 effective in aqueous solution. Whereas a preferred
34 carrier is ethanol and a basic formulation can include
35 a salt of trimethylamine in ethanol, in use the
36 formulation produces trimethylamine on contact with

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1 water. In fishing, the formulation will be vastly
2 diluted in water and therefore it is most surprising
3 that use of the formulation can effectively enhance
4 fishing.

5
6 The pheromones which may be advantageously used in a
7 composition according to the invention include the
8 following:

9
10 Trimethylamine (TMA) (as derived from a salt of
11 trimethylamine such as the hydrochloride) is an
12 exceptionally interesting KIO pheromone. It occurs on
13 human skin and is especially important for females. It
14 is the characteristic odour of a menstruating female.
15 The odour profile is distinctive and is not shared by
16 closely related amines such as, for example,
17 dimethylamine. The aroma is that of fresh shell fish
18 at the threshold level. In fact it is thought that
19 most of the charm of oyster, scallops and the like
20 comes from TMA. The aroma changes with increasing
21 concentration and becomes increasingly unpleasant. At
22 a high level TMA will be perceived as an off-odour in
23 shell fish and the like, and as a sign of lack of
24 hygiene in a human subject.

25
26 The threshold concentration for humans is about 1ppb (1
27 part in 10^9) - this is low by olfactory standards.
28 There is, in fact, great individual variability and the
29 concentration varies around the mean figure by about 3
30 orders of magnitude. This gives rise to great
31 variability; for example, a crustacean may appear
32 delightful to a person of high threshold but may be
33 abhorrent to a person of low threshold (skin
34 sensitivity). See in that matter "Ageing and the Sense
35 of Smell" C, Van Toller, GH Dodd & A Billing, Charles T
36 Thomas, Publisher, Springfield, Illinois, USA, 1985.

1 Another interesting pheromone to be used in the fish-
2 attracting composition is 1-Pyrroline. This is a rare
3 and little studied human pheromone. It is unstable and
4 therefore very difficult to study. It is formed by
5 oxidation of precursor molecules such as 1,4-
6 diaminobutane and 1,4-diaminopentane. These amines
7 occur in a variety of human tissues, and can be formed
8 from appropriate amino acids.

9
10 In order to overcome the instability problem when 1-
11 Pyrroline is to be used in a fish-attracting
12 composition of the invention, the parent amines (i.e.
13 the above mentioned precursors) are incorporated at a
14 high level in the composition. They will slowly
15 oxidize and release the unstable active odorant.

16
17 These parent amines are also called respectively,
18 putrescine and cadaverine, for obvious olfactory
19 reasons and occurred in decomposing animal tissue. The
20 human threshold is in the ppb range.

21
22 A further preferred pheromone is the 5-alpha-androst-
23 16-en-3-alpha-ol. This pheromone is a well-known pheromone
24 which is found in both males and females but is thought
25 to be more important for women (in contrast to the
26 related steroid pheromone, alpha-androstenone). The
27 threshold for human is in the low ppb range. The odour
28 is usually described as musky.

29
30 A still further preferred pheromone is 4-Methyloctanoic
31 acid which is characteristic of the scalp odour and may
32 be found in gamey meat. The threshold is unusually low
33 for a fatty acid and is in the region of ppb. It is
34 has been reported that women are much more sensitive to
35 this odorant than men.

36

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1 A particular composition according to the invention has
2 been tested in fishing experiments on the River Ness,
3 other rivers in the Highlands, and in Ireland and on a
4 variety of Lochs. Positive results have been obtained.

5

6 The composition of this particular non-limiting
7 composition is the following :

8

9	Component No	Name	Amount Required for
10			1000 litres of
11			solvent (ethanol)
12			
13	1	Trimethylamine	7kg
14		hydrochloride	
15	2	1,4 diaminobutane	0.7kg
16	3	1,4 diaminopentane	0.1kg
17	4	indole	50 grm
18	5	skatole	40 grm
19	6	isovaleric acid	40 grm
20	7	4-methyloctanoic acid	10 grm
21	8	4-methylnonanoic acid	5 grm
22	9	phenylacetic acid	20 grm
23	10	2-methyl-E-butenic acid	5 grm
24	11	4-methylpentanoic acid	10 grm
25	12	2-methyl-2-pentenoic acid	10 grm
26	13	5-alpha-androst-16-en-3-alpha-ol	60 mg-6g

27

28 A more general preferred composition comprises

29

30	Component No	Name	Amount Required for
31			1000 litres of
32			solvent
33			
34	1	KIO Pheromone	0.05-50kg
35	2	Alkanoic acid	5g-1.5kg
36	3	Amines	0.1kg-8kg

8

0

17

26

30

32

35

1 Of the three subjects chosen, all had a significant
2 change in their catch pattern, (1) 43 salmon caught (2)
3 75 salmon caught (3) 15 salmon caught.

4
5 Subjects (1) and (2) fly fished the middle/upper
6 reaches of a major salmon river. The river is world
7 famous for the range of salmon fishing available.
8 Spring salmon run (10-25lbs) is moderate. Large runs
9 of Summer grilse (3-8 lbs) and a good run of Autumn
10 salmon (10-30 lbs).

11
12 Subject (3) fly fished a major East Coast spring salmon
13 fishery (10-30 lbs) This river has small runs of summer
14 salmon owing to licensed commercial fishing in estuary
15 waters.

16
17 In all cases the reports returned were similar with
18 more consistent catches particularly when fish were in
19 holding pools (when water levels receded after floods).

20
21 Catch summary (Salmon caught)

22
23

Subject	1996	1997
(1)	37	75
(2)	18	43
(3)	9	15

24
25
26
27

28 No exceptional fish size was reported over that of the
29 1996 season.

30
31 Water levels for 1997 were consistently high by
32 comparison to 1996 resulting in concentration of
33 several salmon runs in holding pools throughout the
34 entire river system.

35
36 Current information on official commercial salmon catch

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1 ventures for 1997 would indicate a 20% reduction on the
2 1996 season.

3
4 Water temperatures were slightly higher than previous
5 years.

6
7 Most salmon for this study were caught on an imitation
8 shrimp fly dressing of various sizes.

9
10 All subjects chosen for this study were male with
11 average age of 45 years.

12
13 All subjects chosen tie their own flies, however,
14 similar selected shrimp/prawn flies were distributed to
15 all.

16
17 Salmon flies used were purchased from local fishing
18 tackle shops.

19
20 The final results of this initial trial study would
21 indicate some relationship between the choice of fly
22 with sample female pheromone and the traditional fly
23 fishing method.

24
25 One fisherman has fished for Sea Bass (commonly known
26 as Salmon Bass) off the east coast for many years, with
27 varying success. This specialist fishing activity
28 fished off chosen rocky points in July/August would
29 normally yield 1-2 fish per outing. This year, using
30 identical fishing lures, substantially improved bass
31 catches were recorded with better than average sizes
32 using the female pheromone formulation described
33 herein. Other specialist bass anglers fishing the same
34 waters did not use the formulation and did not return
35 above average catches.

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1 CLAIMS

- 2
- 3 1. A fish attracting composition comprising at least
- 4 one human female pheromone, or a synthetic nature-
- 5 similar version thereof, wherein the pheromone is
- 6 at least one volatile steroid of the androstene
- 7 family and the composition further comprises at
- 8 least one compound chosen from a complex array of
- 9 alkanoic acids.
- 10
- 11 2. A composition as claimed in claim 1 further
- 12 comprising an acceptable carrier.
- 13
- 14 3. A composition as claimed in any of claims 1 or 2.
- 15 wherein the carrier is an aliphatic alcohol or
- 16 propylene glycol.
- 17
- 18 4. A composition as claimed in any of the previous
- 19 claims wherein the composition comprises
- 20 trimethylamine hydrochloride and 5- alpha-androst-
- 21 16-en-3- α -ol.
- 22
- 23 5. A composition as claimed in any of the preceding
- 24 claims wherein the composition is a liquid.
- 25
- 26 6. A composition as claimed in any of the preceding
- 27 claims which is formulated for injection into
- 28 bait.
- 29
- 30 7. A composition as claimed in any of claims 1-5
- 31 which is formulated as a spray.
- 32
- 33 8. Plastic bait including the composition as claimed
- 34 in any of claims 1-5.

- 1 9. Dried ground bait including a composition as
2 claimed in any of claims 1-4.
3

4

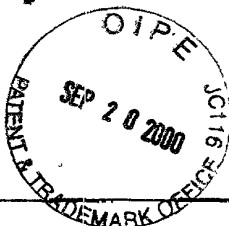
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8

AMENDED SHEET



COMBINED DECLARATION AND POWER OF ATTORNEY

**(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,
CONTINUATION, OR C-I-P)**

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is for a national stage of PCT application.

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

PHEROMONE COMPOSITION

SPECIFICATION IDENTIFICATION

The specification was filed on March 30, 2000, as Serial No. 09/509,695.

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in 37, Code of Federal Regulations, Section 1.56.

PRIORITY CLAIM (35 U.S.C. Section 119(a)-(d))

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

Such applications have been filed as follows.



**PRIOR PCT APPLICATION(S) FILED WITHIN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION
AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. SECTION 119(a)-(d)**

INDICATE IF PCT	APPLICATION NUMBER	DATE OF FILING DAY, MONTH, YEAR	PRIORITY CLAIMED UNDER 35 USC 119
PCT	PCT/GB98/02941	30 September 1998	yes

POWER OF ATTORNEY

I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

APPOINTED PRACTITIONER(S)

REGISTRATION NUMBER(S)

Charles N. Quinn

27,223

I hereby appoint the practitioner(s) associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

SEND CORRESPONDENCE TO

DIRECT TELEPHONE CALLS TO:

Charles N. Quinn
215-972-1965

Charles N. Quinn
Centre Square West
1500 Market Street, 38th Floor
Philadelphia, PA 19102

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

George Henry Dodd

Inventor's signature

Date 08-08-2000

Country of Citizenship United Kingdom

Residence

Post Office Address

TIAH - NA - FOIS

MELLOIN CHARLES

LOCH EWF

WESTER PRESS

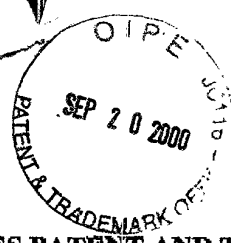
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Practitioner's Docket No. 013455.00009

PATENT



#6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Dodd, George Henry
Application No.: 09/509,695
Filed on: March 30, 2000
Title: Pheromone Composition

STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(b)—SMALL BUSINESS CONCERN

I hereby state that I am an official of the small business concern empowered to act on behalf of the concern identified below:

Kiotach Limited
22 Melton Street
London NW1 2BW
United Kingdom

I hereby state that the above identified small business concern qualifies as a small business concern, as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office under Sections 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third-party or parties controls or has the power to control both.

I hereby state that rights under contract or law have been conveyed to, and remain with, the small business concern identified above, with regard to the invention described in the application identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c), if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

No such person, concern, or organization exists.

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small business entity is no longer appropriate. (37 CFR 1.28(b))

000260-56960560

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed..

In George Henry Dodd
Printed Name of Person Signing

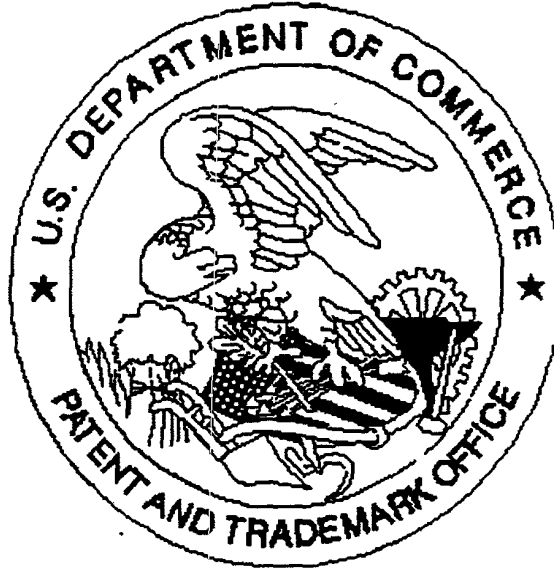
George H Dodd
Signature

R & D Director - KriTech
Title

Date 08-08-2000

22 Melton Street
London NW1 2BW
United Kingdom

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